

Uraniumletter INTERNATIONAL

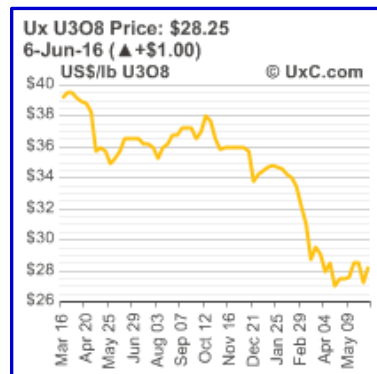
the international independent information and advice bulletin for uranium resource investments

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Uranium Market Outlook



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► Dominance of Western world's uranium industry at stake

Since having reached a 2-year low of US\$ 27.00/lb on April 18, 2016, the U3O8 spot price has stabilized in the second half of the month and during May, at a slightly higher trading range of \$ 27.25-27.50 (\$ 27.25 on May 30, 2016).

This has been followed by a \$ 1.00 increase in the first week of June.

Despite the 20% decline of the spot price since year-end 2015, the long-term U3O8 price maintained a level of \$ 44 in January and February of this year, followed by a small adjustment to \$ 43.50 in the following three months, which helped to support the uranium equity markets.

It is striking to see however, that while the spot price recovered in the first week of June, the long-term U3O8 price declined by \$ 2.50 to a new low of \$ 41.00.

OVERVIEW OF U3O8 PRICES					
	Spot	Long-term		Spot	Long-term
2016					
June 7	28.25	41.00	Year-end 2015	34.25	44.00
May 30	27.25	41.00	May 31, 2015 (year high)	39.50	50.00
April 25	27.50	43.50	Year-end 2014	35.50	49.00
April 18 (2-year low)	27.00	43.50	May 14, 2014 (year low)	28.25	49.00
March 28	29.15	43.50	Year-end 2013	34.50	50.00
February 29	33.50	44.00	Year-end 2012	43.50	56.50
January 31	34.75	44.00	Year-end 2011	61.75	64.00
			Pre-Fukushima accident		
			March 11, 2011	67.75	73.00

In this respect, I refer to my monthly updated **overviews of the market valuation of the world's listed uranium producers**, limited to only 6 companies. Also included are **Uranium Energy**, which as the first ISR-producer in the United States commenced production in November 2011, but had no resources left for production since 2014, and **AREVA Mining**, the mining subsidiary of AREVA of France, a leading integrated nuclear energy company, with its mining activities focused on Canada and Niger, with its mining activities valued by me at 25% of AREVA's total market valuation.

As at May 31, 2016, the valuation of the total 8 companies amounts to US\$ 5.8 billion, compared to US\$ 6.3 billion at year-end 2015 and US\$ 9.8 billion at year-end 2014.

At year-end 2010, two-and-a-half months before the Fukushima disaster, the combined market valuation amounted to US\$ 28.7 billion!

At a current U3O8 spot price of \$ 28.25/lb and long-term price of \$ 41.00, compared to pre-Fukushima spot and long-term prices of \$ 67.75 and \$ 73.00, respectively, the dramatic 78% fall of market valuations in the last 5 years since year-end 2010, demonstrates a high investment recovery potential when U3O8 prices recover to the widely expected pre-Fukushima level in the next few years, driven by a strong growth of 65 nuclear reactors under construction, of which 24 in China, 8 in Russia, 6 in India and 9 in the European Union, and in addition 173 planned reactors of which 42 in China, 25 in Russia, 24 in India and 13 in the European Union.

On the other hand, it has to be accounted for however, that the time line for nuclear plants under construction and planned nuclear plants has been extended for 2-3 years, due to tightening regulatory safety and environmental requirements. The extensions also apply to the 24 reactors in **Japan** being in the process of restart approvals, which affects the growth outlook for uranium demand.

Looking at the attached overview of **Uraniumletter** International's **Peer Group of the world's top-20 uranium companies** by location of listing, of these companies 9 are listed on the ASX, of which the activities of 5 companies focused on Australia, 2 companies on Namibia and one each of the US and Spain.

Top-15 producing uranium mines in 2015

Mine	Country	Main owner	Type	Production t/U	% of world
Traditional countries (5)					
McArthur River	Canada	Cameco (69.8%)	underground	7.352	12.1
Cigar Lake	Canada	Cameco (50%)	underground	4.333	7.2
Olympic Dam	Australia	BHP Billiton	by-product/underground	3.178	5.3
Ranger	Australia	Rio Tinto (63.39%)	open pit	1.700	2.8
Rabbit Lake	Canada	Cameco	underground	1.620	2.7
					30.0
Emerging countries (10)					
Tortkuduk & Myunkum	Kazakhstan	Katco JV / Areva	ISL	4.109	6.8
SOMAIR	Niger	Areva (63.6%)	open pit	2.509	4.1
Inkai	Kazakhstan	Inkai JV / Cameco	ISL	2.234	3.7
Budenovskoye 2	Kazakhstan	Karatau JV/Kazatomprom -	ISL	2.061	3.4
South Inkai	Kazakhstan	Betpak Dala JV / Uranium One	ISL	2.056	3.4
Priargunsky	Russia	ARMZ	underground	1.977	3.3
Langer Heinrich	Namibia	Paladin Energy	open pit	1.937	3.2
Central Mynkuduk	Kazakhstan	Ken Dala JSC / Kazatomprom	ISL	1.847	3.1
Budenovskoye 1, 3	Kazakhstan	Akbastau JV / Kazatomprom -	ISL	1.642	2.7
COMINAK	Niger	Areva (34%)	underground	1.607	2.7
Total Top 15				40.162	36.4
World total				60.518	
<i>source: WNA</i>					



US uranium production keeps falling to lowest production since 10 years due to continuing pressure on uranium prices

According to figures released by the US Energy Information Administration (EIA), US uranium production for 2015 fell 32% from 2014's production of 4.8 million pounds U3O8 (1,881 tonnes U) to 3.3 million pounds U3O8 (1,271 tonnes U), which is the lowest US annual production since 2005.

According to the EA, 2015 production represents 7% of the anticipated uranium market requirements of 46.5 million pounds U3O8 of the 99 US civilian nuclear power reactors.

Despite challenging market conditions four companies succeeded to emerge from an advanced development stage, including **Uranium Energy** (November 2010 – no production in 2014 and 2015), **Ur-Energy** (August 2013), **Uranerz** (taken over by **Energy Fuels** in June 2015), **Peninsula Energy** (December 2015). However, these companies are facing negative operational cash flows as a result of the strong decline of U3O8 prices, which are only partly compensated for by higher prices of delivery contracts.

With **Uranium Energy** having no operational cash flow at all, this may put the Company's existence at stake.

► First quarter US uranium production

Production of uranium concentrate in the first quarter 2016 was 626,522 pounds U3O8, up 0.4% from the fourth quarter 2015 and down 46% from the first quarter 2015. During the first quarter 2016, US uranium was produced at 6 U.S. uranium facilities, 2 more than in the fourth quarter 2015.

Strata Energy's Ross CPP (central processing plant) in Wyoming began production in the first quarter 2016 after having been under construction since third quarter 2014.

Overview U.S. uranium in-situ leach plants				
Plant name	Country/State	Owner	Production capacity (pounds U3O8 p/year million)	Current operating status
Nichols Ranch	Wyoming	Energy Fuels <i>(formerly Uranerz)</i>	2.0	Operating
Willow Creek	Wyoming	Uranium One USA	1.3	Operating
Lost Creek	Wyoming	Ur-Energy	2.0	Operating
Ross CPP	Wyoming	Strata Energy	0.375	Operating
South Ranch Highland	Wyoming	Cameco	5.5	Operating
Crown Butte	Nebraska	Cameco	1.0	Operating
Sub-total			12.175	
Hobson ISR Plant	Texas	Uranium Energy	1.0	Standby
La Palangana	Texas	Uranium Energy	1.0	Standby
Alta Mesa	Texas	Mestena Uranium	1.5	Standby
Goliad	Wyoming	Uranium Energy	1.0	Permitted and licenced
Moore Ranch	Wyoming	Uranium One Americas	0.5	Permitted and licenced
Total			17.175	



Only two producers and two advanced-stage companies determine Australia's foreseeable uranium outlook

Of the uranium companies focused on Australia only **Energy Resources of Australia** ("ERA"), 68% owned by Rio Tinto, is a pure uranium producer, but **BHP's Olympic Dam**, Australia's largest uranium producer, with uranium to be a major by-product of its copper operations, **Toro Energy** and **Vimy Resources** are Australia's only advanced-stage development companies.

Toro Energy's Wiluna Project in Western Australia has a total resource of 84 million pounds (200 ppm cut-off) with 40 million pounds at 951 ppm U3O8 (500 ppm cut-off) across its Centipede, Millipede, lake Maitland and lake Way properties. The Company has not completed technical optimization studies yet to achieve a revised project economic structure on which Toro can execute a fully optimised Definitive Feasibility Study, but no time line available yet.

Vimy Resources has a maiden ore reserve of 15.2 million tonnes at 770 ppm for a total metal content of 22 million pounds U3O8 on its Mulga Rock Project and a total resource estimate of 65.8 million tonnes at 520 ppm U3O8 for 75 million pounds U3O8.

After having reported a Pre-Feasibility Study (PFS) in November 2015, Vimy Resources made significant progress in Q1, 2016 towards the completion of its Mulga Rock Definitive Feasibility Study (DFS).

On-going resource estimates and DFS are expected to increase reserve and resource base, while completed test pits and geotechnical drilling provide excellent data for more accurate mining cost estimates for the DFS.

With a number of key milestones achieved, Vimy is on track to complete its DFS in Q1, 2017.

The Company's production target is 3 million pounds U318.

With **Toro** having presented itself as Australia's premier advanced uranium development company during the last five years, based on above facts, in my view, Vimy in 2016 finds itself in a more advanced development stage than Toro.

With **Toro Energy** currently valued at A\$ 100.3 million and **Vimy Resources** at A\$ 73.5 million, I consider Toro to be relatively overvalued and have removed the Company from my 2016 Shortlist in investment recommendations as per June 1, 2016.



China acquires growing strategic interest in Canada's uranium industry

With **Cameco**, **Fission Uranium** and **NexGen Energy** having entered into long-term purchase agreements with Chinese/Hong Kong partners, which in case of NexGen and Fission Uranium also include the acquisition of strategic equity positions, China's control over Canada's uranium industry is growing.

Also considering the strongly growing uranium industry in Kazakhstan and Russia, China's growing uranium needs on the demand side, a dominant position of these three countries may lead to them controlling the future course of uranium prices.

In this respect, it speaks for itself that for Chinese partners significantly higher future off-take and equity conversion prices are in conflict with their strategic interests.



Cameco (CCO – TSX)

On November 10, 2010 a long-term supply agreement was signed under which **Cameco** will supply CGNPC of China with 29 million pounds of U3O8 (13,150 tonnes U3O8) by 2025.

The value of the contract was not disclosed.

On May 9, 2016, **Cameco** and **China General Nuclear (CGN)** signed an agreement to further expand and deepen their cooperation in the joint development of green field uranium exploration projects. The agreements build on a frame work agreement in June 2010 that committed the companies to negotiate long-term uranium purchase agreements and potential joint development of uranium resources.



Fission Uranium (FCU – TSX)

On January 11, 2016 **Fission Uranium** ("**Fission**") announced that it had executed a Subscription Agreement and an Offtake Agreement with **CGN Mining of China** pursuant to which CGN Mining purchased approximately 96,73 common shares at Cdn\$ 0.85 per share, equal to 19.99% of the issued and outstanding common shares of Fission, for gross proceeds of approximately Cdn\$ 82.26 million.

Under the terms of the Offtake Agreement, CGN Mining will purchase 20% of annual U3O8 production and will have an option to purchase up to an additional 15% U3O8 production from Fission's PLS property after commencement of commercial production.



NexGen Energy (NXE – TSX.V)

On June 2, 2016, **NexGen** announced that it had entered into a binding term sheet agreement with CEF Holdings of Hong Kong, 50% owned by Cheung Kong Holdings of Hong Kong, the flagship company of Mr. Li Ka-shing (Asia's richest person), and 50% by Canadian Imperial Bank of Commerce, **to issue and sell to CEF and/or affiliates of its shareholders US\$ 60 million an aggregate principal amount of unsecured convertible debentures of NexGen.**

The debentures will carry a 7.5% coupon over a 5-year term and will be convertible at the holder's option into common shares of NexGen at a conversion price of US\$ 2.33 (Cdn\$ 3.05 at current exchange rate of 1.31), equal to a 30% premium to the 20-day volume-weighted average trading price calculated in US dollars.

Two-thirds of the interest (equal to 5% per annum) is payable in cash. One-third of the interest (equal to 2.5% per annum) is payable in common shares at a price equal to the 20-day VWAP ending in the day prior to the date on which such interest payment is due.

Including the proceeds from the sale of the debentures, NexGen will have cash reserves of approximately Cdn\$ 100 million. Proceeds from the debentures will be used to fund the continuing exploration and development of the Company's SW2 properties (which include the Rook I project and the Arrow Deposit).



Cameco loses majority ownership in JV Inkai, Kazakhstan

On May 27, 2016, **Cameco** announced that it had signed an agreement with government owned Kazatomprom of Kazakhstan and Joint Venture Inkai to restructure and enhance JV Inkai.

The new agreement replaces the memorandum of agreement signed by Cameco and Kazatomprom in September 2012. The agreement is subject to obtaining all required government approvals, including certain amendments to JV Inkai's existing Resource Use Contract, which is expected to take 18 to 24 months.

The Inkai operation is an in-situ recovery uranium mine in south Kazakhstan that is owned and operated by JV Inkai which in turn is currently owned by **Cameco** (60%) and Kazatomprom (40%). Cameco's current interest in production is 57.5% based on previous agreements with Kazatomprom.

JV Inkai will have the right to produce 4,000 tonnes of uranium (10.4 million tonnes of U3O8 per year – Cameco's share 4.2 million pounds) as increase from the current 5.2 million pounds U3O8 (Cameco's share 3.0 million pounds). The agreement provides for annual production at the Inkai operation to be ramped up to 1.4 million pounds U3O8 over 3 years following receipt of required approvals.

Subject to further adjustments tied to the refining as described below, **Cameco's** ownership interest in JV Inkai will be adjusted to 40% and Kazatomprom's ownership interest in JV Inkai will be adjusted to 60%.

Cameco and **Kazatomprom** will complete a feasibility study for the purpose of evaluating the design, construction and operation of a uranium refinery in Kazakhstan, with the capacity to produce 6,000 tonnes U annually as uranium trioxide (UO₃).

The agreement includes provisions that would make **Cameco's** proprietary uranium refining technology available to **Kazatomprom** on a royalty-free basis and grants **Kazatomprom** a 5-year option to licence **Cameco's** proprietary uranium conversion technology for purpose of constructing and operating a UF₆ conversion facility in Kazakhstan.

If **Cameco** and **Kazatomprom** decide to build the refinery, the agreement also provides that **Cameco's** and **Kazatomprom's** respective ownership interests in the limited liability partnership that will own refining will be 71.67% for Kazatomprom and 28.33% for Cameco. **Kazatomprom** will have the option to obtain UF₆ conversion services at **Cameco's** Port Hope facility for a period of 10 years and receive other commercial support.

Cameco's ownership interest in JV Inkai is increased to 42.5% upon commissioning of the refinery.

Depending on the level of commercial support **Cameco** provides, **Cameco's** interest in JV Inkai may be increased to 44% and its ownership stake in the refinery would also be adjusted from 28.33% to 29.33% U.

Top-15 producing uranium mines by country			
Country	Number of uranium mines	Production in tonnes 2015	in % Top-15
Kazakhstan	6	13.949	34.4
Canada	3	13.705	33.8
Australia	2	4.878	12.0
Niger	2	4.116	10.1
Russia	1	1.977	4.9
Namibia	<u>1</u>	<u>1.937</u>	<u>4.8</u>
Total	15	40.562	100.0
Western countries (Canada, Australia)		18.353	45%
Emerging countries (Kazakhstan, Niger, Russia, Namibia)		21.929	55%
			100%

2016 SHORTLIST OF URANIUM INVESTMENT RECOMMENDATIONS as at May 31, 2016

Company	Focus	Trading symbol		Share price		Change in %	Market	Market	Change in %
				May 31 2016	Year-end 2015		Capitalization May 31, 2016	Capitalization year-end 2015	
Producers (4)									
				Cdn\$	Cdn\$		US\$ mln.	US\$ mln.	
Cameco	Canada	ABX	TSX	15.280	17.070	-10	4.627	4864.5	-5
				US\$	US\$				
Ur-Energy	United States	URG	NYSE	0.468	0.650	-28	67	84.6	-21
				A\$	A\$				
Paladin Energy	Namibia	PDN	ASX	0.220	0.240	-8	270	300.1	-10
Energy Resources of Australia	Australia	ERA	ASX	0.360	0.360	0	142	136.1	4
Advanced development companies (5)									
				A\$	A\$				
Toro Energy	Australia	TOE	ASX	0.060	0.070 1)	-14	91.0	102.5	-11
Denison Mines	Canada	DML	ASX	0.630	0.630 2)	0	257	- 2)	-
Berkeley Energia	Spain	BKY	ASX	0.660	0.490	35	97	65.0	49
Vimy Resources	Australia	VMY	ASX	0.320	0.360	-11	56	60.0	-7
				Cdn\$	Cdn\$				
UEX	Canada	UEX	TSX	0.220	0.150	47	50	26.6	88
Exploration/development companies (9)									
				Cdn\$	Cdn\$				
Laramide Resources	Australia/US	LAM	TSX	0.240	0.285	-16	17	17.4	-2
GovEx	Niger	GXU	CNSX	0.080	0.045	78	10	4.8	108
Forsys Metals	Namibia	FSY	TSX	0.065	0.080	-19	7	7.8	-10
CanAlaska Uranium	Canada	CVV	TSX	0.570	0.420 3)	36	10	7.5 1)	33
Purepoint Uranium	Canada	PTU	TSX.V	0.075	0.075 2)	0	10	- 2)	-
				US\$	US\$				
Uranium Resources	US / Turkey	URRE	NASDAQ	1.990	6.240	-68	10.3	28.2	-63
				A\$	A\$				
Cauldron Energy	Australia/US	CXU	ASX	0.080	0.120	-33	18	23.7	-24
Deep Yellow	Namibia	DYL	ASX	0.010	0.010	0	15	14.0	5
Bannerman Resources	Namibia	BMN	ASX	0.030	0.030	0	16	8.7	84
Others - special situations(2)									
				Cdn\$	Cdn\$				
Khan Resources	Mongolia	KRI	CNSX	0.860	0.440	95	57	26.7	113
Mega Uranium	Australia	MGA	TSX	0.140	0.070	100	30	14.2	111
1) removed as per June 1, 2016									
2) included as per June 1, 2016									
3) included as per May 1, 2016									
Shortlist average performance 2016:				24.6%					